ID.me

Presentation for Kansas
Unemployment Modernization
Council

July 13, 2021

Executive Summary

An Identity
Network
Built to Provide
Trust in
Government



Social programs are facing an existential threat as both federal and state governments move more services online to meet customer demand



Criminals are attacking state and federal applications that gate government funds and have already stolen more than \$400BN from state workforce applications

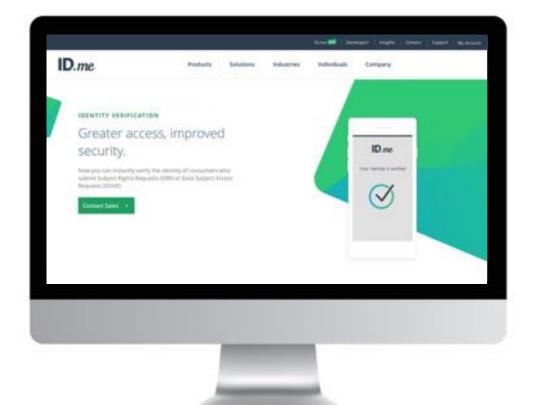


ID.me prevents fraud while enabling access for citizens who need government assistance





ID.me's network already includes over 19% of the 18+ population in the United States with more than 160,000 new users joining daily











50M+
Members

160K+

Daily Sign-Ups

7Transactions/User

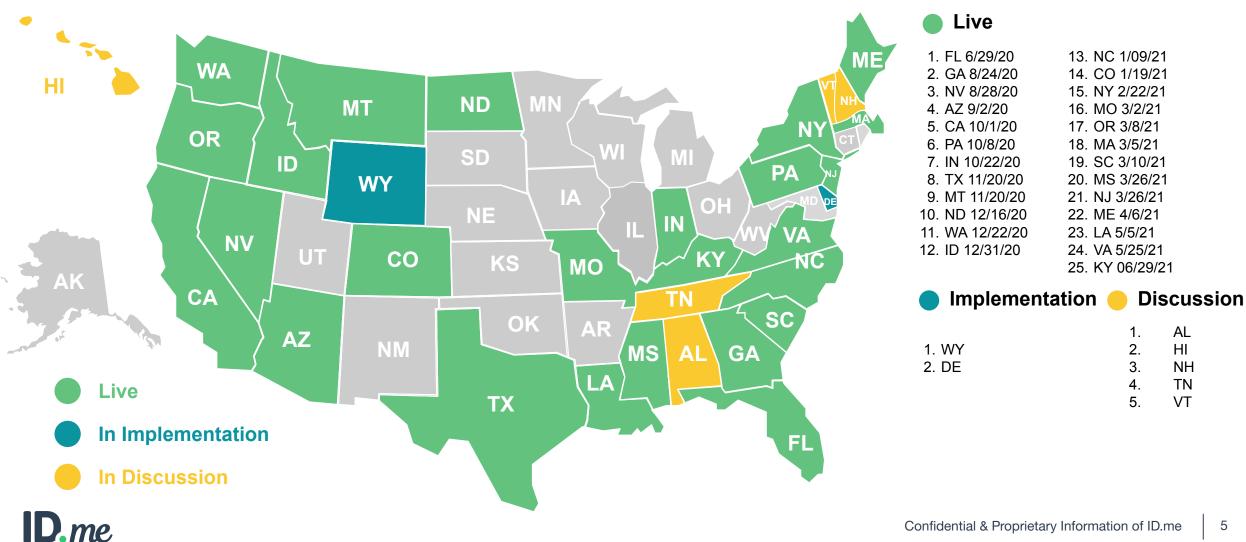
575Partners

Leading The Way

- First identity network in America to make digital credentials portable across Federal and State government, healthcare, and commerce
- Utilized by 575 brand partners as a critical tool users leverage to login or verify
- Only identity verification vendor to offer video chat as a relief to those who fail self service
- Partnered with 27 states using
 ID.me for unemployment insurance.



25 States Trust ID.me to Verify Unemployment Applicants



ID.me's NIST 800-63-3 Identity Assurance Level 2 with Presentation Attack Detection ensures a live face is captured with each selfie that is taken during verification

Market for identity verification is moving from knowledge-based methods to possession and biometric based methods.

Knowledge-Based Verification (KBV)

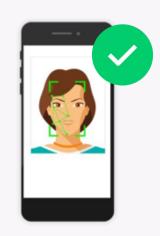


Inherently weak.
Answers available on dark web.

Driver's License or Passport



Selfie with Liveness



Device & Telecom Verification



To prove with confidence that the user is who they claim to be, the user should prove that they physically possess something that reflects their identity – something with a reputation built over time or is hard to forge.



Alternative verification methods include a recorded video chat with an ID.me agent and in-person where a selfie is captured by the agent

MOST COMMON

ONLINE, SELF-SERVE



If user hits a roadblock verifying their identity online.

RELIEF VALVE

VIRTUAL IN-PERSON PROOFING VIA
VIDEO CONFERENCE CHAT WITH AN ID.ME
TRAINED CALL CENTER AGENT



Trained agent proofs user to NIST IAL2 via video chat

RELIEF VALVE

OPPORTUNISTIC

IN-PERSON PROOFING WITH TRUSTED REFEREE



User goes to a Trusted Referee location and proofs via ID.me's mobile app driven process







Basic Identity Theft (20% of Claims): an attacker leverages stolen personal data to file a claim in the victim's name.

Kansas identity theft reports up 1,802% last year; highest rate in the U.S.



Types of Fraud ID.me Combats Targeting Workforce Agencies Social Engineering (7.5 - 10% of Claims): an attacker convinces a victim they are verifying their identity for a job or to get prize money.

Prisoner Fraud (Unknown % of Claims): incarcerated individuals who are ineligible to file claims do so anyway.

First-Party Fraud (Unknown % of Claims): an attacker convinces a mule — an individual who knowingly aids the attacker -- to let the attacker file a claim in the mule's identity in exchange for a cut of the claims payment. The mule then contacts law enforcement and pretends to be a victim of identity theft.

Synthetic Identity Theft (Unknown % Claims): an attacker <u>creates a fictional identity in credit records</u> and uses the fake or synthetic identity to file a claim for an identity that does not exist



Confidential & Proprietary Information of ID.me

Of the 4.7 million reports filed with the FTC in 2020, 1.4 million claimed identity theft, more than any other type of complaint





Criminals leverage various techniques to attack agencies, and ID.me deploys mitigating controls to stop and/or quickly detect fraud

25 states are currently using ID.me for PUA/UI unemployment verification

Blocked an estimated **2.2** million fraudulent claims through July 2021

Prevented over **\$44 billion** in taxpayer loss to fraudulent payments

900% Increase
in dark web traffic related to
ID.me since Oct 2020

Primary Fraud Vectors



Social Engineering: legitimate owner of identity (victim) unwittingly helps the attacker perpetrate fraud



Secondary Phone: criminal uses breached PII to register a phone in the victim's name with the telecom to defeat carrier verification



Fraudulent Documents: suspicious documents uploaded appear to be clearly fabricated, edited, or altered

Mitigating Controls

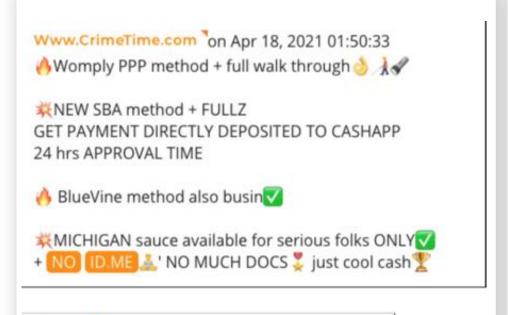
Bolster Messaging: ID.me notifies individuals at their phone number of record that their identity was used at an agency – similar to banks and credit cards

Device Verification: ID.me monitors for a single device and/or IP tied to multiple verified accounts, different phone numbers and/or SIMs

Machine Learning Algorithms: ID.me monitors for duplicate document images and numbers, and leverages ML/Al to detect fabricated elements



Tactical intercepts of dark web chatter show criminal activity targeting both state and federal programs



Dior ★ on Mar 29, 2021 15:11:15

PPP 20k loan sauce
Fresh pros with DL#

5 states hittin easy backpay no IDME

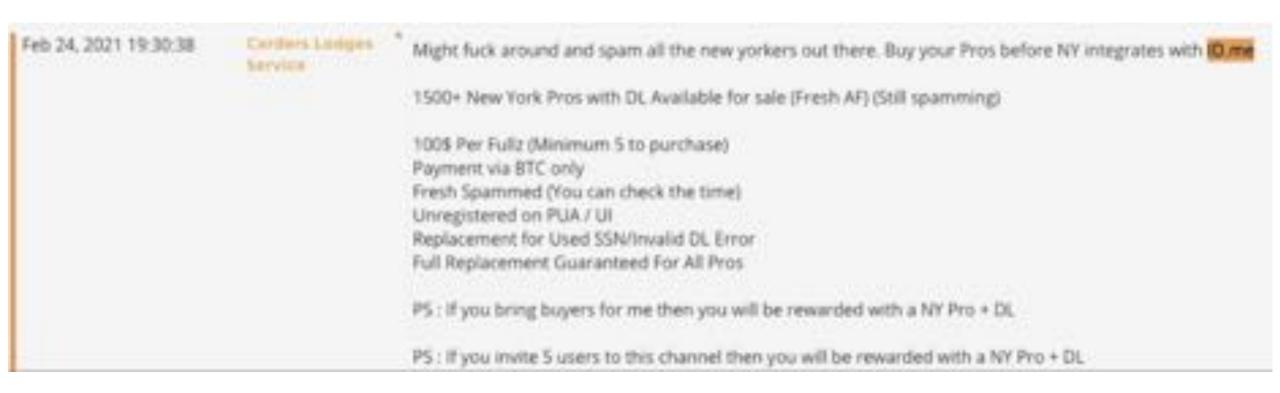
Lets eat

on May 15, 2021 15:16:00 States paying rn without id.me Connecticut \$949 max weekly Rhode Island \$890 max weekly Vermont \$810 max weekly New Hampshire \$727 max weekly Delaware \$690 max weekly Wisconsin \$670 max weekly Tennessee \$575 max weekly Maryland \$730 max weekly Enjoy the fraud www www



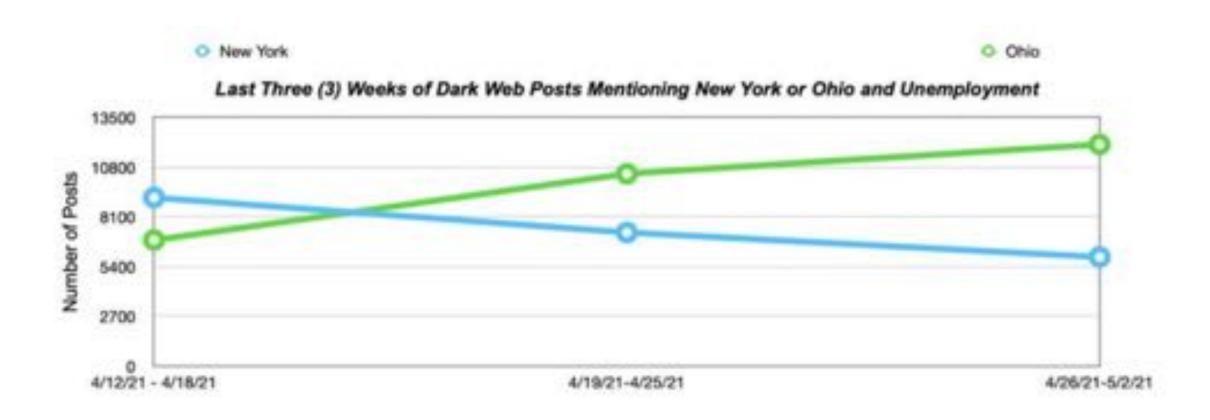


The selfie step essentially forces criminals to use their actual face when committing fraud -- most aren't willing to do so -- but some are



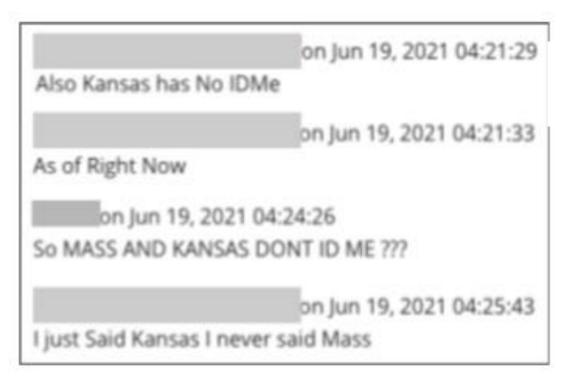


After ID.me went live in New York, darkweb chatter decreased by 35%; at the same time, chatter tied to Ohio's Office of Workforce Development increased by 76%

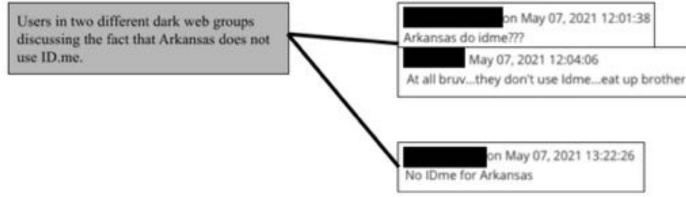




Fraud is prevalent to states that did not implement controls









Criminals are increasingly using computer generated 3D masks to attempt to commit identity theft but they have not been successful





When ID.me activated live selfie, fraud dropped by 10 - 29% in each state

Date Range: 1/28/21 - 3/8/21

Funnel Stage	VA (LOA3)	CA EDD (IAL2 + Liveness)	State 2 (LOA3)	State 3 (LOA3)	State 4 (LOA3)
Users Started Telecom Verification	190,443	654,292	220,181	93,578	165,832
Sent Link to Device but Did Not Click	3%	5%	3%	3%	3%
General Telecom Failure	0%	0%	0%	0%	0%
Failed Possession Check	1%	1%	1%	1%	1%
Completed Possession, Started Fraud Check & Identity Resolution	139,020	557,022	174,925	75,089	138,988
Failed Prove Trust Score (Fraud Check)	5%	3%	6%	7%	5%
Failed Prove Eligibility (Identity Resolution Step 1)	3%	4%	6%	11%	8%
Failed Prove Identity (Identity Resolution Step 2)	9%	9%	15%	28%	20%
Successfully Completed Verification	132,746	333,705	153,439	65,579	103,016

Consistent dark web chatter provides evidence that ID.me's controls are working

Lone Ranger on Apr 26, 2021 02:00:06

Do you know how to bypass the selfie verification?

PPP,ID.ME, BYPASS. SAUCE on Apr 26, 2021 02:02:56

Don't waste your time

London Brit on Mar 07, 2021 21:05:44 How you get pass ID.Me selfie video ? Southside on Apr 10, 2021 13:56:43
You ain't gonna get paid without id me

opera Jen on Mar 22, 2021 00:59:02
States which I can file without id.me









Enabling secure & efficient transactions for everyone

Recommendations:



Goal is to increase access for legitimate users and to reduce fraud:



Access is vital to social programs for legitimate citizens



Security controls need to be upgraded and can only be met with a modern technology solution and not a piece meal document reader



Adoption is easier with a pre-configured solution that is easy to implement

Thank You!

Pete Eskew

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Twitter: @eskewp

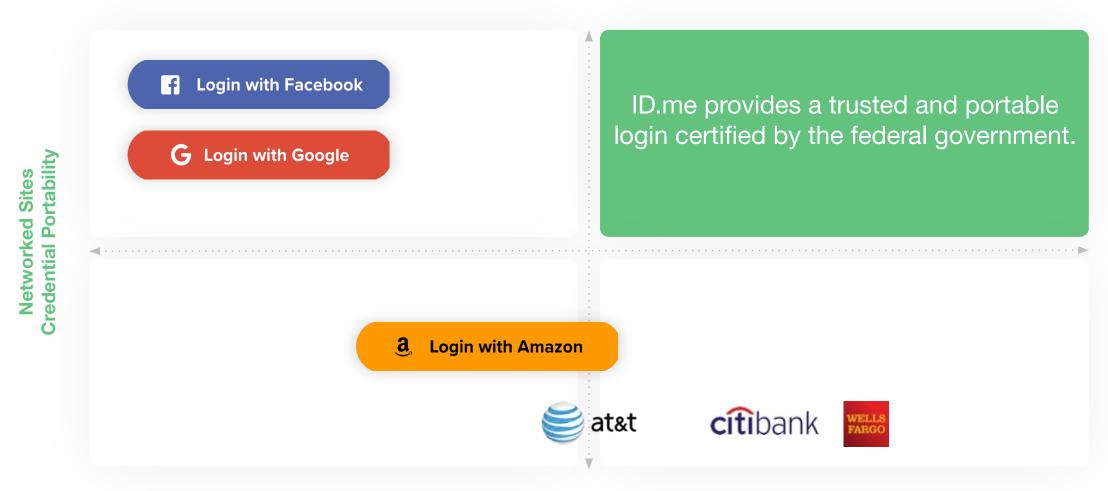
About ID.me

ID.me is the next-generation digital identity platform that enables trusted and convenient interactions between individuals and organizations. ID.me provides seamless online identity verification for government, financial services, and healthcare to facilitate access to high value services online and keep them safe from fraud. The platform brings together best-in-class identity and fraud vendors into a comprehensive, easy-to-deploy solution for partners. For more information, visit **www.ID.me**.



Digital Identity is Broken

Portable logins aren't trusted and trusted logins aren't portable





Leading brands and agencies trust ID.me to streamline authentication

FEDERAL GOVERNMENT













STATE AND LOCAL GOVERNMENT











RETAIL & CONSUMER TECHNOLOGY

































HEALTHCARE & FINANCIAL SERVICES















Allscripts¹







ID.me provides a federally certified solution to unify secure login



CERTIFIED

Certified IAL2/AAL2 Credential Service Provider (CSP) with the highest self-serve and overall access rates in the public sector



SECURE

FedRAMP Moderate solution that leverages remote verification of IDs, MNO data, fraud algorithms, & FIPS 140-2 level encryption



PORTABLE

Delivers Identity-as-a-Service through federated identity protocols: SAML 2.0, OAuth 2.0, OIDC







ID.me's Virtual In-Person Proofing ensures all users can prove their identity online in minutes at different assurance levels:

- Users who present a high-risk so a recorded video session would provide a strong deterrent to fraud
- Users who are recent immigrants
- Users whose information is entered into financial and/or utility records inaccurately
- Users with a limited credit history with credit bureaus
- Users with a limited history in utility records
- Users who are uncomfortable with technology and require additional assistance



ID.me has a robust set of identity verification, validation, and authentication capabilities that provide differing levels of trust



Verification

- Government ID (Strong)
- Subscription
 Phone/Telecoms (Strong)
- Facial Liveness (Strong)
- Video Proofing (Strong)
- Knowledge Based Verification (Fair)



Validation

- Credit Bureaus
- Mobile Network
 Operators/Telecoms
- DMVs
- State Licensing Data
- Many Additional Registration Authorities



Multi-Factor Authentication

- Enhanced SMS
- Native App Push
- Native App TOTP
- FIDO2 Tokens
- Fraud/Device
 Intelligence Feeds



ID.me provides configurable authentication policies based on risk and attributes

Strong Validation, but Weak Verification

Strong Validation & Strong Verification

1. Group Verification

Clients

Retail, Automotive, Subscription Services

Solution

Verify group affiliation to provide exclusive access to benefits

Product Variations

- a. Military
- b. Student
- c. Teacher
- d. First Responder
 - e. Government Employee
- f. Company Employee
 - g. Nurses
 - h. Doctors
 - i. Income

2. SCRA Monitoring

Clients

Financial Institutions, Telecoms

Solution

Automatically identify SCRA-protected individuals in order to appropriately adjust interest rates and adequately handle other protections

Product Variations

- a. Single Record Verification
- b. Bulk Verification
- c. On-going Monitoring

3. Document Verification

Clients

Financial Institutions, Gambling, Shared Economy

Solution

API-driven - Use ID document (driver's license or passport) to verify identity. Can be combined with selfie and selfie + liveness.

Product Variations

- a. Bronze
- b. Silver
- c. Gold
- d. AMVAA Add-On

4. KBA Replacement

Clients

State and Local Government, Hospitality, Gaming, Healthcare (Patient), Financial Services

Solution

Identity verification flow where user can verify identity using Mobile Identity Verification OR Document Verification

Product Variations

a. ID.me CSP b. White-Label CSP

5. Fortified Identity

Clients

State and Local Government, Hospitality, Gaming, Healthcare (Patient), Financial Services

Solution

Identity verification flow where user can verify identity using Mobile Identity Verification AND Document Verification

Product Variations

a. ID.me CSP b. White-Label CSP

6. NIST 800-63-3 IAL2/AAL2

Clients

Federal, State, Local Government, Healthcare

Solution

NIST 800-63-2 LOA3 or NIST 800-63-3 IAL2/AAL2 credentialing flow. Combines attribute validation, device verification, document verification, with biometric matching, or Virtual In-Person or In-Person proofing

Product Variations

White-Label CSP

a. ID.me CSP

7. EPCS Identity Proofing

Clients

Healthcare (EPCS)

Solution

NIST 800-63-3
identity proofing and
authentication,
combined with
medical provider
verification

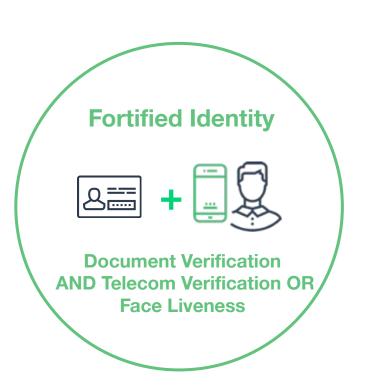
Product Variations

a. ID.me CSP



Organizations select from a menu of turnkey policies to map the appropriate level of legal ID proofing based on risk and requirements





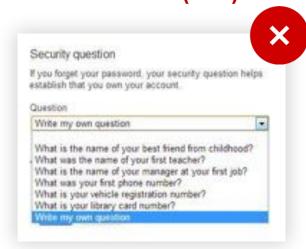




ID.me provides a Knowledge Based Authentication replacement offering for identity proofing that is more secure, inclusive, and has pass rates exceeding 90% for all users

Market for identity verification is moving from knowledge-based methods to possession and biometric based methods.

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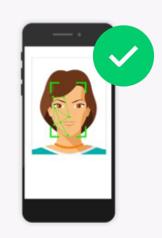


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Selfie with Liveness



Device & Telecom Verification



To prove with confidence that the user is who they claim to be, the user should prove that they physically possess something that reflects their identity – something with a reputation built over time or is hard to forge.



Total cost of ownership is very high when online authentication services fail and drive customers into less efficient channels

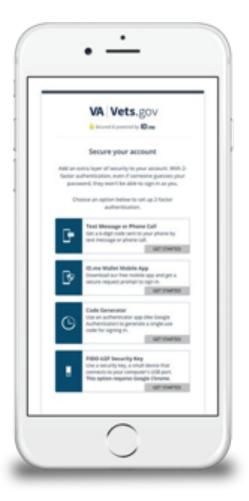




Source: GAO Report on Taxpayer Authentication https://www.gao.gov/assets/700/692712.pdf



ID.me User Authentication Capabilities



Authenticator Type	Description	Demographic	NIST
Enhanced SMS	NIST 800-63-3 recommends deprecating SMS-based MFA without compensation controls. ID.me leverages telecom data/SIM verification to mitigate risk	98% of citizens prefer to use Enhanced SMS for MFA to complete login, so making this option secure is important from a user experience perspective	NIST AAL2
Call to Landline	Enables a user to establish a landline as a means of securing their login to protect it from takeover or for account recovery	20% of Americans over 65 do not own a cell phone according to Pew	NIST AAL2
Native App Push (iOS & Android)	Enables a user to secure their account from takeover and authenticate themselves using native app Push	Smartphone users and more security conscious users may prefer to use native app Push to secure their accounts	NIST AAL2
Native App TOTP (iOS & Android)	Enables a user to secure their account from takeover and authenticate themselves using TOTP on their device	Smartphone users and more security conscious users may prefer to use native app TOTP to secure their accounts	NIST AAL2
FIDO2 Tokens	Enables a user to secure their account from takeover using an "un-phishable" token they an carry on their keychain	Security conscious users may prefer to use a FIDO U2F token to secure their accounts	NIST AAL3



ID.me's approach provides the same NIST assurance level for employees and contractors as derived PIV but with superior usability and interoperability

Risk-Adaptive Authentication



AAL 1: Employee or Contractor leverages current authenticator, typically password, with either the organization's current system or ID.me.



AAL 2: Previously proofed Employees or Contractor step up to LOA 3 or IAL2 by authenticating their account at AAL2 or AAL3 with ID.me.



IAL 2 or LOA 3: Employees or Contractors who have not been proofed undergo remote identity proofing and then link their CAC/PIV's certificate using ID.me's SCVP server and the federal bridge.

Attribute Based Access Control



IAL2/AAL2 with Certificate:

Derived PIV credentials drop down to LOA 3 or IAL2/AAL2. ID.me's approach is better as it enables non-PKI LOA 3 and/or IAL2/AAL2, federation with more app friendly dev protocols (SAML & Oauth 2.0 versus PKI), more choice between authenticators for users, and ID.me can still validate the certificate against the CRL in the background and send over in the SAML 2.0 assertion.





User rights mandated by California's CCPA and the EU's GDPR have been intentionally built into ID.me from inception to advance privacy

GUIDING PRINCIPLES

Privacy Enhancing and Voluntary:

- Users are the sole controllers of data release
- Users may destroy their ID.me credential and associated data at any time
- Users control all data sharing based upon explicit consent after appropriate authentication
- Users can see all authorized apps and data elements shared in their My Account portal and can revoke access

Secure and Resilient:

 FedRAMP ATO at NIST 800-53 Moderate, NIST 800-63-3 IAL2/AAL2

Interoperable:

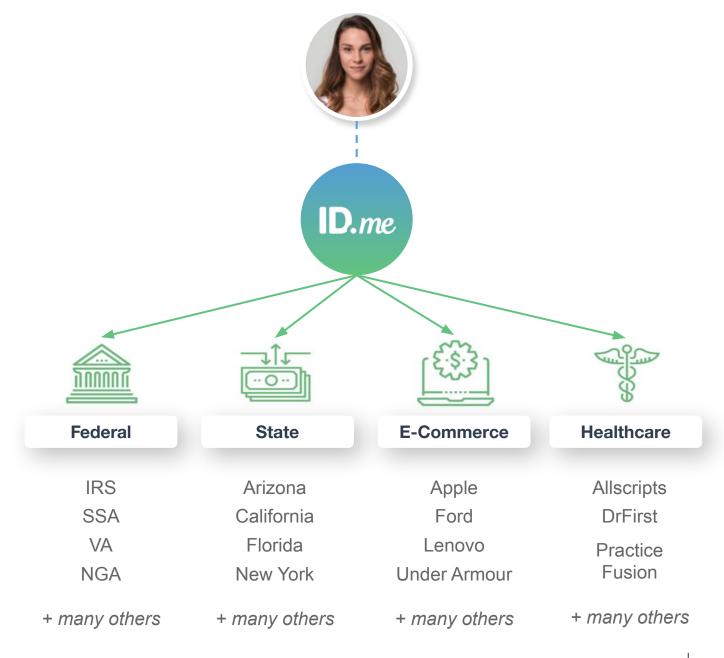
 Supports SAML 2.0, OAuth 2.0, OpenID Connect, and RESTful APIs

Cost-effective and Easy-to-Use:

 Highest access rates in government and a shared service rate card



Once verified, users can log in with their ID.me credential anywhere ID.me is accepted.





Examples of organizations with common workflows for the same users include retailers, government agencies, and healthcare clinics

CREDENTIAL

Student ID

OR

Military ID



Government Agencies

Multi-Factor Authentication



Government ID

(Legal Identity)



Healthcare Clinic

Multi-Factor Authentication



Government ID
Health Insurance Card
Payment Card
Family Medical History

